R E P O R T R E S U M E S

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DISPOSE OF WASTES, AN AID TO EXTENSION AND VILLAGE WORKERS IN MANY COUNTRIES.

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THE BOOKLET DESCRIBES IN DETAIL THE CORRECT METHODS OF DISPOSING OF WASTE MATERIALS, INCLUDING TRASH, GARBAGE, WASTE WATER, HUMAN EXCRETA, AND ANIMAL WASTES. COMPLETE INSTRUCTIONS FOR DIGGING, BUILDING, AND CLEANING ARE GIVEN UNDER EACH TOPIC. (CL)

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DISPOSE OF WASTES

AN AID TO EXTENSION AND VILLAGE WORKERS IN MANY COUNTRIES

FES AID

SANITATION SERIES NUMBER 6

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Federal Extension Service—United States Department of Agriculture, in cooperation with Agency for International Development, U. S. Department of State.

This is for

YOU

The Home Economics Extension Worker

or

Village Worker

The information in this booklet is based on experiences of extension workers like yourself and health workers in many countries. You'll find ideas to help you teach families how to get rid of wastes around the home.

Use this material in any way best suited to your needs.

BY KATHRYNE SHEEHAN HUGHES

Appreciation is expressed for assistance from: health, sanitation, home economics and information personnel of the Agency for International Development; specialists in the Federal Extension Service, and staff members of other agencies.

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DISPOSE OF WASTES

We all want to live in a clean healthful place. One way to have cleanliness and protect health is to dispose of wastes in a safe way.

Wastes include:

trash

garbage

waste water

human excreta

animal wastes

Garbage and trash left around the home and yard provide food for:

flies	mice
roaches	rats

These insects and rodents often carry disease germs from one person to another.

These germs may cause you or your child to have such diseases as:

typhoid fever

dysentery

murine typhus fever

rat-bite fever

food poisoning

DON'T LET GARBAGE AND TRASH OR WASTES PILE UP IN AND AROUND YOUR HOME.

When you get rid of trash and garbage, you help your family have a safe and comfortable home and community.

You protect your family's health and reduce the danger of fire and accidents.

You help keep your community attractive and healthful.

When every house and yard in the community is kept clean, everyone benefits.

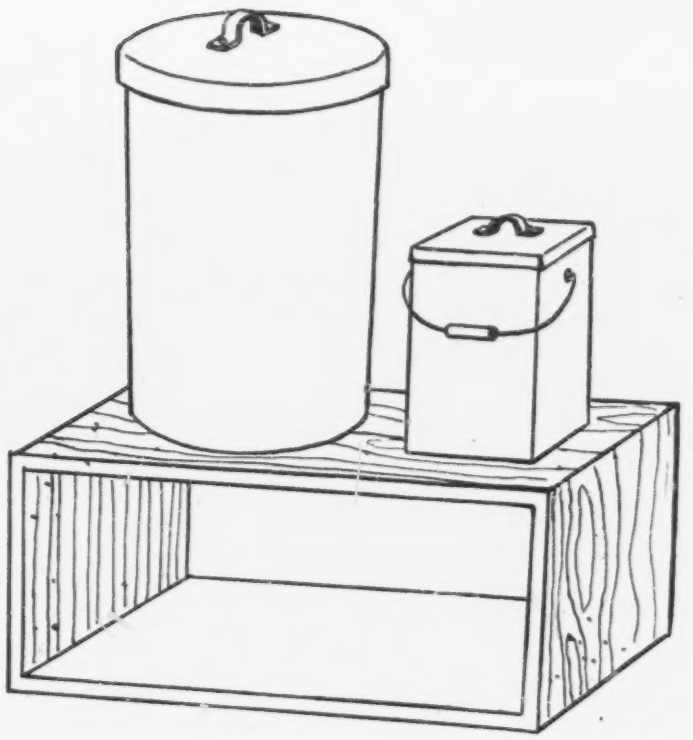
Rats and insects do not like clean homes and neighbors.

GARBAGE

Garbage consists of food wastes, such as peelings, scraps and bones.

TO GET RID OF GARBAGE:

- use it for food for animals such as chickens or pigs
- use it for fertilizer
- bury it.



Feeding garbage to animals

Animals can eat vegetable peelings and table scraps. Remember to give animals only fresh garbage. Spoiled food is not good for people or animals.

When garbage is used to feed pigs, boil it for 30 minutes. This keeps pigs healthy and prevents spread of trichinosis from food scraps. Be careful that there are no bones, glass or metal in garbage fed to pigs.

Preparing garbage as a fertilizer

- empty it into a pit or trench
- cover with a thin coat of lime
- cover with six inches dirt to keep away flies and animals
- leave it buried for two or three months before using
- remember always to cover garbage with enough dirt every time you put it in a pit or trench to keep away insects and animals.

Containers for Storing Garbage

Containers for storing garbage should have a tight fitting cover to help keep out insects and animals. They should be water tight. Oil drums and large tin cans make good garbage containers. Make lids for them.

In many parts of the world, galvanized metal cans with lids are used.

Garbage containers need to be kept off the ground.

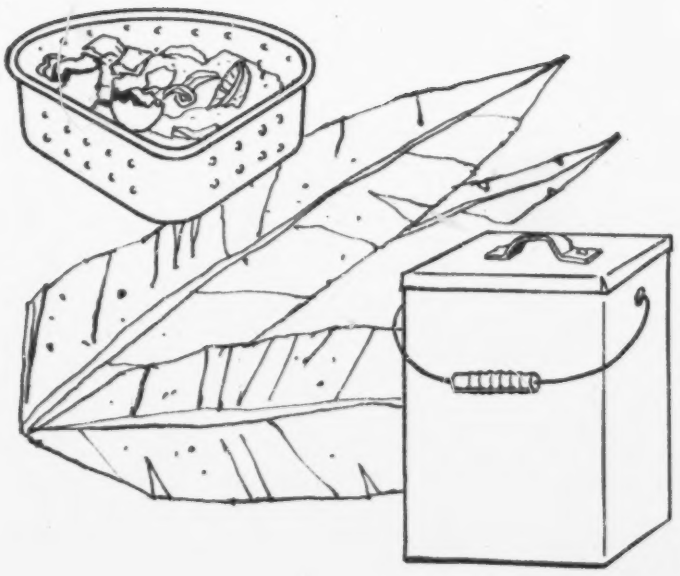
Stands or benches protect the containers from being upset by animals and from rusting out at the bottom.

Stands should be made so it is easy to keep the ground clean underneath.

The garbage containers should be cleaned often with soap and water.

Dry the garbage containers in fresh air and sunshine. Water standing in containers will cause rust.

Rinse with lye or other disinfectant from time to time.



Line the containers with paper or leaves. This helps to keep them cleaner and reduce odors. Banana or other large leaves could be used.

Wrapping the garbage in large leaves or papers will also help to reduce odors.

Drain garbage before putting it into the container. This will help keep the container clean.

Spray insecticides around the container.

TRASH

Trash includes paper, tin cans, tree limbs, dead weeds and plants, old rags, broken dishes and things you do not want any more.

TO GET RID OF TRASH:

- keep trash separate from garbage
- dispose of trash regularly--avoid letting it pile up
- burn or bury the trash.

Things like broken pottery or dishes, pieces of tin or iron should be buried. These will not burn. If there is a community dump, they may be taken there.

Burn dead weeds, plants and leaves, old rags, broken baskets and anything that you can. These could be used as fuel for cooking when fuel is expensive and scarce.

Keep trash out of your house and your yard. Keep it out of the street, too, and out of streams and rivers.

Containers for Storing Trash

Containers for storing trash may be made of metal, wood or heavy cardboard.

Use containers with tight fitting covers to help keep out insects and animals.

If possible, keep trash containers off the ground on a stand or bench.

Place containers where they are easy to use.

Get rid of trash regularly--avoid letting it pile up.

This woman has collected the trash that was around her home. She plans to have it carried away.

WHAT TO DO WITH HUMAN WASTES

It is of greatest importance that human waste or night soil be disposed of in a safe way. If not, it may cause sickness.

Some of the diseases which are carried from the bodies of people through the waste material from the intestines are:

hookworm
typhoid fever
dysentery
cholera
schistosomiasis
infectious hepatitis
guinea worm

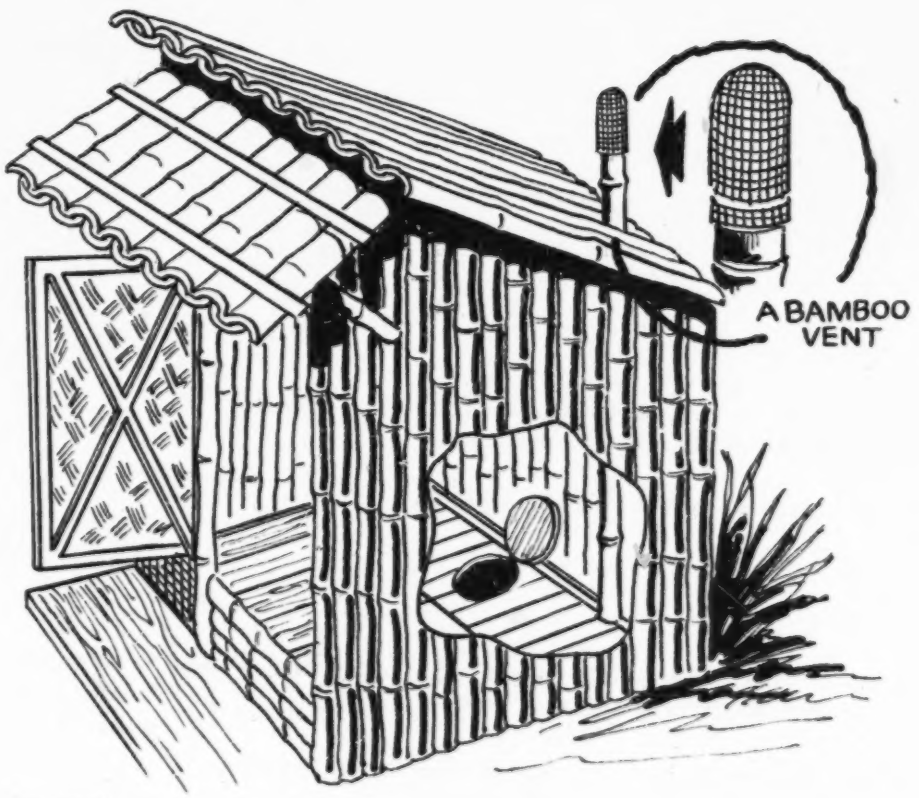
Human excreta may be disposed of in several ways. The safest way is a flush toilet with a septic tank or a sanitary latrine.

BUILD A SANITARY LATRINE

Ask the sanitary inspector from your health department to help you to--

- select the location for your latrine
- determine how deep to dig the hole
- decide about the materials to use
- advise you how to build it.

He can tell you how to build it to keep out insects and animals.



This Honduras child has a better chance for good health because her family built a latrine. It will be even better when they make it flyproof and construct a cover for the whole.

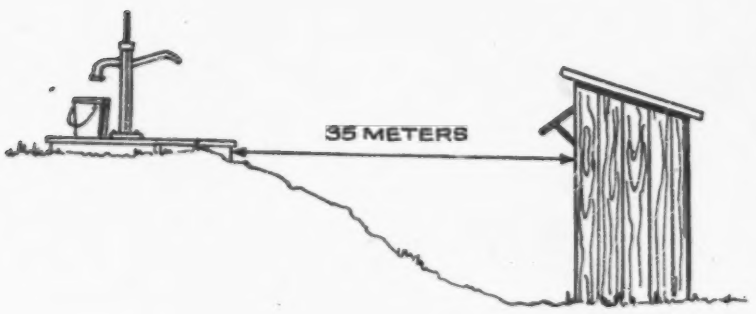
A sanitary latrine can be built by digging a deep hole in the ground and building a small house over it.

The floor should be covered with close fitting boards or bamboo. This helps to keep the hole dark. If possible, have a concrete slab for the floor. This slab could be moved when you dig a new pit.

Make a hole in the middle of the floor.

The hole should be deep. Ask your sanitary inspector of the health department how deep to make the hole.

This type of toilet should be built at least 35 meters away from the source of water used for drinking, laundering and bathing.



The latrine should be on a lower level than these water sources.

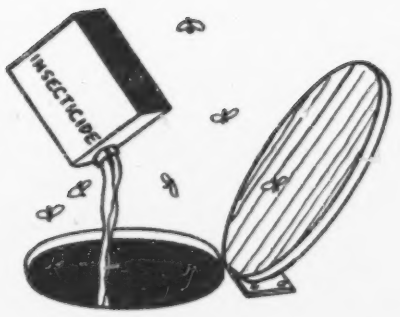
It should be in a dry place if possible.

It should <u>not</u> be built over a stream or river.

Cover the hole with a lid of iron, wood or other material with a handle on it.

The cover helps to keep the hole dark inside and to keep the flies out.

Remember to put the cover back after using the latrine.



DDT or other insecticides may be used to destroy flies in the latrine.

The house over the latrine hole may be built of wood, bamboo or other material.

A vent in the roof carries bad odors away, and should be screened.

Painting or whitewashing the latrine inside and out will help keep it clean. Also, it will be easier to clean and will last longer.

Scrub the inside walls and the floor of the latrine with soap and water and a disinfectant at least once a week.

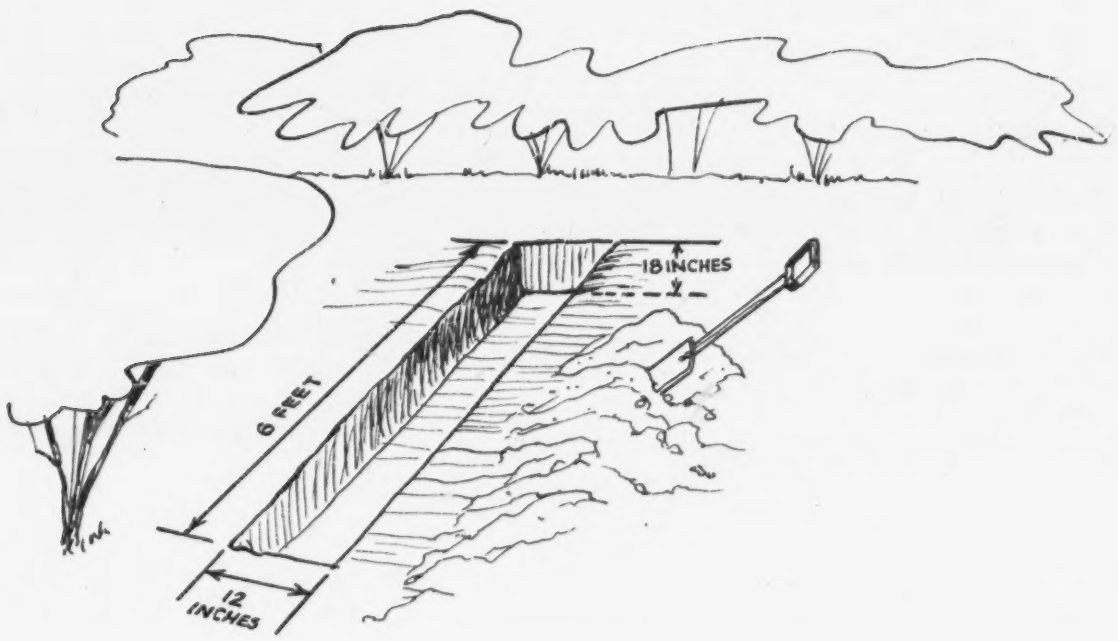
Wash your hands after going to the latrine.

Keep a container of water, soap and a basin for washing hands where it is always easy to use.

When the latrine hole is full, move the house if it can be moved or burn it for fuel. Fill the latrine hole with dirt.

When you cannot have a flush toilet with a septic tank, an outside latrine made properly and kept clean is the safest way to get rid of human waste.

OTHER WAYS OF DISPOSING OF HUMAN EXCRETA



A Latrine Trench

If you soon find water when digging a hole for a sanitary latrine, you may need to make a latrine trench. You will not need to dig as deep a hole. The latrine trench will not last as long as one with a small house over a hole.

If possible, find a place where the soil is sandy, and also where there are bushes or long grass to give privacy or you can make a wall of tree branches with leaves.

The trench should be on a lower level and 35 meters from your water supply.

Dig a trench about 12 inches wide and 6 feet long and 18 inches deep.

Put the material from the trench in a pile on one side. Keep a shovel or flat piece of wood nearby.

When someone has used the latrine, he should cover the excreta with the excavated material. When the trench is full, cover it well and dig a new trench.

It is better to have no roof with this kind of latrine. Sunshine on the ground helps to destroy the disease germs found in human excreta.

The latrine trench does not last long, so it will be necessary to prepare new ones often.

Banana and pawpaw trees will grow well near the old trench latrine. The fruit will be clean and safe to eat. This is because the fruit does not touch the ground. For several years do not grow foods that will touch the ground near the old trench latrine.

Do not allow human excreta on the ground around your house or in the yard. Children and adults can learn to use a latrine or a latrine trench.

Dig a Hole

When you are in the field or the bushes, and a sanitary latrine is not available, you can still get rid of human waste in a safe way.

- Dig a small hole with a sharp knife, stick or shovel.
- Cover the hole after using it.

Night Soil

Untreated night soil may carry disease germs.

There is no known way to treat night soil at home so that it is safe. Never use it to fertilize your garden.

To protect yourself and your family from germs found in human waste:

Wear shoes. Wearing shoes when working outside the house will help to avoid hookworm. Often hookworm is found in soil containing human waste.

When working in dirt, that might have night soil in it, use a hoe or shovel. Do not touch the dirt with your hands.

Wash your hands well with soap and water before eating and after using the latrine. Keep your fingers out of your mouth.

If there is a danger any night soil has gotten into your garden, cook your vegetables. Do not eat them raw.

WASTE WATER

When water is scarce, you can re-use waste water for watering the garden. This water will help to make your garden grow.

Water from laundering can be used when you scrub floors.

Never throw waste water out of the window or door or into ditches and streams. Pools of water in the yard make breeding places for mosquitoes and other insects.

Some homes may have a sink with a septic tank or a cess pool. Then waste water thrown down the sink is not a problem.

If you do not have a sink, dig a hole in the yard and fill it with rocks. Empty the waste water into this hole. The water will seep through the rocks into the earth.

ANIMAL WASTES

Wastes from animals and fowls are not good in houses or near them. That is why animals must have a place to live away from the house.

Use animal manure to fertilize your garden and fields. Well rotted animal manure is safe to use as a fertilizer for your garden.

DEAD ANIMALS

Bury animals as soon as they die.
Flies and other insects are attracted to dead animals. Do not leave them lying around in the yard or in the pens.

Do not throw dead animals into streams, rivers or irrigation ditches.

DEMONSTRATIONS

Show:

- The kinds of containers for storing garbage and rubbish
- How to dispose of human excreta

  by digging a small hole
  by digging a trench

A demonstration is being given in Jordan on how to dig a hole for a sanitary latrine.

Suggestions to Help You Give a Good Demonstration

Select a topic within your program which the women have helped plan.

Prepare yourself carefully.

Know more about the subject than you plan to teach.

Outline your demonstration step by step and write down exactly what you will say at each step.

Practice your demonstration until you can do every step without hesitation.

Use only equipment and materials available to the families concerned.

Arrive at your meeting place ahead of the audience and arrange all materials for your demonstration neatly and in the order you will use them.

Plan for your audience to be seated so that everyone can see and hear easily.

Use visual aids in your demonstration if they will help to make your presentation clearer.

Ask one of the women to assist you. This helps to develop leadership.

Evaluate your own demonstration.

(1) Did the women learn how to do what you demonstrated?

(2) What evidence was given that the women plan to carry out this practice in their homes?

(3) How could this demonstration be improved?

Getting rid of wastes properly

- helps keep your house and yard clean
- helps you and your family avoid disease
- makes your home and community better places to live

BOOKS TO HELP YOU

- Home Making Around the World, Agency for International Development, Washington 25, D. C.
- Safe and Sanitary Home Refuse Storage, U. S. Department of Health, Education, and Welfare, Public Health Service Publication No. 183.